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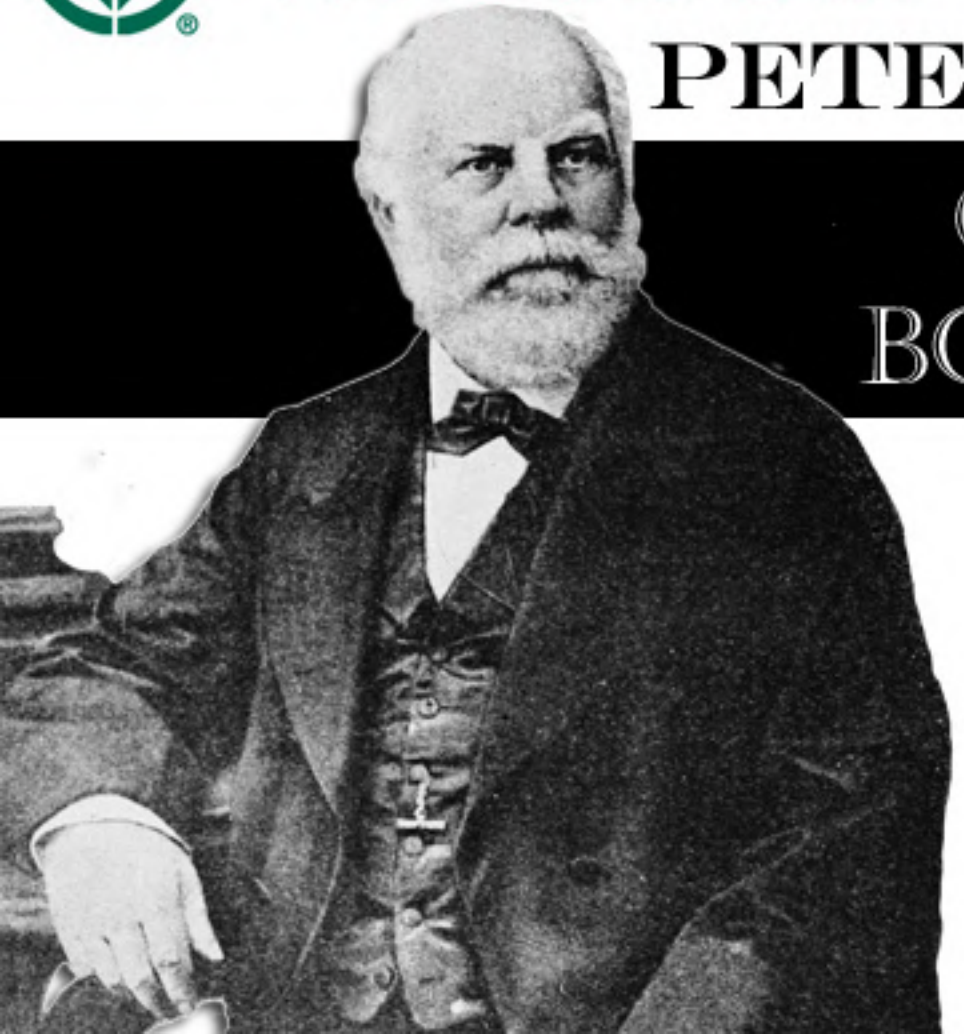

Pagination Note:
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12 *Cuscuta verrucosa*

caule ramoso, cymis umbelliformibus
compositis (parvis) floribus pedunculatis (parvis)
5. partitis; tubo corollae globoso-
campanulato, calycis campanulati
verrucosi segmenta ovata
obtusiuscula duplo superante, longo cum acumine, virgato
Cassinii libri longe obtusiusculis reflexis
subbrevioribus; staminibus libro
(duplo) brevioribus minimis; squamis ovatis
fimbriatis, tubum excedentibus
stylis ovarium globoso-depressum
subaequantibus; capsula globosa, depressa
corolla

Texas, on Pelaloxtemon Dry Prairies, July Drummond 1833
(3d Coll. N.º 247). Dry Prairies near Houston, flowering in July
a variety with a little larger and more membranous
flowers and longer styles, on Pelaloxtemon Gaura, Daucus, Solidago Hedyotis Oxalis Chrysopsis, Coreopsis tinctoria
Cornus Leptosia

collected by Mr. Lindheimer
1842
multiflora
K. Lindheimer
May & June
near Braunfels

This and the following species
have been confounded in my first paper,
owing to the few and incomplete
specimens which came under my
observation. I have since obtained
a full suit of Texan Cuscutae
specimens by the Lindheimer
and am now able to correct
these mistakes. The description pag 341
belongs principally to C. hispidula
but the figure N.º 25 represent
this species, though the calyx
is not sufficiently marked.

This species is found on Open dry
Prairies in Texas, so far as known
always on Pelaloxtemon. The
calyx of the
specimens is reddish, the brown calyx
is campanulate, fleshy and verrucose or apparently glandulat all over
divided to the middle
the lobes are ovate obtuse or somewhat mucronate
and much shorter than the tube of the corolla

5448

St Louis Octob 12th 41

Prof. B Silliman

Sir

Encouraged by Dr Gray I send you an essay on the Cactaceae of Texas originally with the request to give it a place in your valuable journal, if you deem it sufficiently interesting. I have also taken As a compensation I should only request you to have the drawings well engraved, and to furnish me with the usual number of extra copies.

If you deem my labors sufficiently interesting to find a place in your journal I purpose to send you from time to time the more important results of my botanical studies. As reference I can give you Dr Torrey and Gray of New York. Nicollet & Kirby

Respectfully
Your obt servt
George Engelmann MD

Prof B Silliman MD
New Haven

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This is globose or deeply
campanulate exactly like
that of C. vulgivaga, the lobes are not much longer
but drawn out into a fine
point, which is (at least
in the dried specimens) inflexed.
The stamens are short &
the scales larger than in any
other ~~[illegible]~~ the tube, covering the ovary entirely
~~filling it entirely and extending when stretched out~~
~~nearly to the anthers~~. — The ovary and
capsule are depressed
without any stylopodium.
The capsule as

Cuscuta verrucosa
membranaceous and 2
appears to be composed of large
rather ~~square~~ cells
~~round~~ ish or angular cells
orbicular somewhat
the tube

5449

Catesbæa additions

(Curtis)

* Cassia cathartica — N. Caroles & Mascarenes

Cassia pentagona. copala Spruce

Texas not Spruce's

and Ruiz & Pav. Fl. Peruv.

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Cuscuta Polygonorum

caule subsimili ramoso
floribus subsessilibus conglomeratis
sub 4 partitis, tubo corollae campanulato
calycis segmenta aequante et laciniis
oblongis acutis patentibus subaequante
staminibus limbum aequantibus,
squamis subbifidis, laciniis
adpressis, stylis ovarium
depressum aequantibus; corolla
cum staminibus ad capsulae
depressae basin persistente.

In Polygonis. Stolen in Lycop.
Pearhoro et aliis virosis. St Louis Aug. Sept.

This is a much lower plant
than the two other with orange
colour'd stems growing round
the Polygona in overflowed flats
th bottoms of Sinkholes, or margins
of ponds, where in the year 1839
my friend F. Linthemier who is
now settled in Texas & to whom zeal and
kindness I owe many specimens
from that interesting country
first discovered it. In the following
year I found it in the thickets
on the banks of the Illinois river, near Peru
formed by immense Ambrosiæ
with Bidens, Spartina &c. Whether
any Polygonum was there I can not
recollect, having then paid no
particular attention to this genus;
The flowers &c in the Specimen
from Illinois river are a little
longer pedunculed, & the very
next segments of the calyx longer than the tube of the
corolla.

Oenanthe Phellandrium Lam
Phellandrium aquaticum L.

Spr. I, 890
R. H, 203

Europ. et Amer. bor. aqua

Fr. 1820

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Another Difference I can not discover. C. polygonum 2.

This and the following species
have easily distinguished from the others by their orange coloured
~~Others~~ By their open campanulate ~~Corolla~~ stems
flowers, with the remnant of the
Corolla always at the base of the Capsule.
They are distinguished from one another by the
characters given. Stamens broad at base, subulate
in the tube are The Scales are smaller than in most other species, adpressed and
between C. Corylifolium & Cephalanthum
in their shape; they are nearly
always deeply bifid, but
the two segments rarely consist
of one or two teeth as in C. Corylifolium
but are again divided or fimbriated. They are
more or less
adpressed to the tube so that the
Calyx depressed ovary appears naked
in the open campanulate Corolla;
in the following species it is
surrounded & covered by the
convergent or reflexed multifidous
scales, and appears as if kept confined
~~Down~~ by a network (or by claws the naked
or by claws
Eye can distinguish these distinguishing
characters.

Calyx lobes generally as large
as the tube of the corolla,
sometimes a little shorter
& sometimes rather longer;
mostly subacute, but occasionally
also obtuse

Corolla fine their membranous
cellular tissue fine

while in C. Saurini

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2 In pratis uliginosis Europ. med.
Amer. bor.

In pratis prope Offenbach
et in dem Hengster prope
Seligenstadt 1826

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1915

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~~#~~

Our plant belongs to the same section as C. pentagona and C. Polygonoides; ~~for the first~~ ~~it is~~ having a depressed ovary without stylopodia and (probably — for the structure of the corolla it can not be doubled) a capsule ~~with three cells~~ the remains of the corolla at base.* The texture of calyx & corolla is very fine resembling that of C. pentagona etc. — From these it is distinguished ~~by the shape of the calyx~~ by the long pedicells, from C. Polygonoides also by the 5-parted small flowers, the well developed ovulary appendages, by the filiform styles, from C. pentagona by the shape of the calyx, the more or less erect not inflexed lobes of the corolla the longer filaments etc from C. anemiana by the tube of the corolla being much shorter than the lobes etc.

* The ovary fills the tube of the corolla entirely and is surrounded by the slightly converging scales.

#,

Dec 1846 I examined and figured a fragment of Humboldt's own specimen (vide tab XI

1847 Fendler brought home abundant specimens of the New Mexican plant. —

1852 I cultivated the same from seeds sent from El Paso by Dr Bigelow. It grew only on Fortulaca oleracea, Gillesii & on Tilinum leaves; — Flowers large 2 l. diameter; lobes of corolla 3/4 l. long; fl. white, filaments pale yellowish. fl. somewhat odorous. — Glomerules lax, but clustered; flowers pedicelled but by no means umbelled; flowerbud long ovate (in Humboldt's plant ob ovate, obtuse). Pedicells twice as long as flower, enlarged, thickened upward so that the really hemispherical calyx appears turbinate. Lobes of calyx triangular ovate acute, as long as the tube; — Tube of Corolla hemispherical, lobes spreading, fully reflexed, lanceolate, at the tip incurved, twice as long; — of delicate white texture, with very slightly crenulated margins (under the glass) Filaments subulate, about half as long as lobes of corolla, erect; scales fringed, incurved covering the small ovary; ovary globose — depressed; styles filiform much longer than ovary. — Capsule and seeds very small, covered by the withered corolla which tears loose from its base without being elevated as in C. Cephalanthi and others. —

Sept 27 Further observations Capsula circumscissa! very few capsules were matured — all were circumscissa, separating from the base which with the dissepiment was persisting in the base of the calyx !!

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Cissus umbellata Humb B. & K.? Torrey?

Caule capillaceo, floribus ~~fasciculis~~ paucifloribus fasciculis florum basi involucratis umbelliformibus
longe pedicellatis ~~in fasciculos capitis~~ 5-partitis
~~paucifloris~~ ~~dispositis~~; calyce cupulaeformi membranaceo 5-lobo
ultra medium partito, lobis ovato-
lanceolatis acutis. (Cr. acutiusculis)
tubum corollae campanulatum ~~brevem~~
~~calyce breviore~~ superantibus, ~~lobis~~ lanceolatis acutis, ~~corolla~~ ~~calycino~~ tubo duplo longioribus, erectis v. patentibus
~~antherae~~ filamentis e basi lata subulatis
antheris oblongo-linearibus, squamis
ovatis fimbriatis, fauce corollae
~~obturgentibus~~; stylis filiformibus
ovarium globoso-depressum, tubum corollae ~~aequantibus~~; capsula? globosa?

Almost exclusively
On Potulaca oleracea ~~Canada~~ rejects
on the upper Canadian river
Rocky Mountains; Expedition II, 86.
vide als. Torrey - Ann. Lyc. N. York. 2. p. 223
de James, - Long
~~H~~ coll. 1820.

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Dr Torrey compares this species with
Humboldt's C. umbellata of Mexico and considers it
identical with it. — I have no means
to decide whether it is so or not
the description of the mexican plant
agrees tolerably well with our specimen,
but it is too incomplete, to
determine it satisfactorily; the
differences that I can ascertain
are only ~~slight~~ the following: the lobes
of the corolla are not reflexed, but
erect or somewhat open; and the
filaments are not linear but
distinctly subulate from a broad base;
the size of the flower, the length of
the pedicels, etc agree, the proportions
of the corolla, & the shape of the ovary
are not mentioned.

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Rom. & Schult. 6. 203-204

C. umbellata (Hunt. Bonpl.): umbellis pedunculatis (6-) 8-floris; lacin. cal. acutis; corollis campanulatis; lacin. acutis, (sub-) reflexis; staminis lacinias corollinas aequantibus exsertis. —

Planta inodora. Caulis parasit. in plantis humilibus volubilis, capillaceus, teres, glaber. Flores longe pedicellati. magnitudine seminis Sinapis; pedic. glabris flore 2-3-ve longioribus. Calyx 5-partitus, glaber; lacinias ovatis erectis corolla paulo brevioribus. Corolla alba, limbo 5-fido. Squamae 5 infra bas. staminum ovatae, tenuissimae. Stam. 5. fauci corollae inserta. Filamenta linearia, glabra. Antherae oblongae erectae. Styli 2. capillacei glabri, patentes, exserti. — In Nova Hispania inter Zimatlan et Salamanca." (Torrey's plants is pretty near Acapulco"

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C. canadensis L.

Cuscuta ~~canadensis~~ vulgivaga

Caule ramoso, ~~laxe~~ sub 5-partitis floribus pedunculatis, glomeratis
s. cymosis; tubo corollae rumpanulato calycis
segmenta ~~obtusa~~ subobtusa obtusa, lanceolata
lata carinata, et carinas subobtusas obtusas
patentes (demum reflexas) superante; squamis
bifidis ~~rotundatis~~ (stylopodio conico) convergentibus
(stylis ovarium subaequantibus; ~~capsula~~
~~pyxidio globosa~~ corolla rumpente (plerumque
marcescente et basi circumscissa) capsulae globosae
persistente (raro, cum circumdante)

" β. glomerata fl. minoribus glomeratis

" γ. laxiflora fl. majoribus laxe cymosis

~~Flor. S.~~ tetrameris fl. majoribus 3-4-partitis
~~species optima to be the most extended~~ umbellatis cymosis

of all the ~~Texana~~ ~~northamerican Cuscutae. I have~~

This species is the most widespread of
all the ~~american~~ Cuscutae, I know, ~~variety~~
~~in the northern form~~ and adheres less than
any other to certain the same genus or family
of plants ~~the~~ (variety) † Var. β is the northern form,
my specimens ~~from~~ are from Vermont
to Canada (J. Carey!) and New Hampshire
to Pennsylvania (J. Carey!); ‡ var. γ is the
southern & western form Western New York
to Georgia (A. Gray!) Western Pennsylvania (Dr Short) Missouri to
Louisiana and Arkansas; Dr Gray in Herb. (J. Carey) (Dr Boyk
var. γ. Connecticut to Ohio (J. Carey)

δ. Alabama on Salix and Aster & Boltonia (S.B. Buckley
N. Carolina on Polygonum (M.A. Curtis) Massachusetts (J. M. Al

I was therefore at a loss to designate it with the name of its parent plant; I have not seen two specimens on the same parasitic plant!

and had to resort to a designation taken from some property of the plant itself. I was obliged to do the same (quality & position) in regard to two other species, which I have only seen in a few dried specimens; but if further investigations should prove that they adhere to a certain class of foreplants I am perfectly willig to give way to a name designating this circumstance.

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Roem. & Schult. 6. 70. 205~

23. C. Gronovii, Willd.: pentandra, stigmatibus capitatis, floribus paniculatis. Gronov. Virg. 18. Reliqu. Willd.

In Virginia.

This is all!

5465

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C. ~~Cassinata~~ valgoga 6

This Cuscuta is intermediate between C. Sauveni and C. Cephalanthi. ~~In all three the lobes of calyx are shorter than the tube of the corolla and the lobes of the corolla are also obtuse. It is however distinguished from both~~ In all three the lobes of calyx & corolla are obtuse and the former shorter than the tube of the Corolla; ♯ the flowers and fruit are larger than in C. Cephalanthi and in var. ♯ nearly of the same size as in C. Sauveni;] but ~~does~~ plant is distinguished from both by the carina of the lobes of the calyx, which is formed by larger uneven & prominent cells, and by large pellucid dots in the Corolla, which ~~are~~ may be mistaken also for glands but are nothing but larger cells than the rest of the tissue. ♯ As in C. C the lobes of the Corolla are shorter than the tube and as in C. S the scales are large, and incurved ~~the tube~~ the corolla is semipellucid, but deeper than in C. Sauveni, or C. Polygonorum. ♯ ♀ ♂.

P

~~The Specimen from Georgia, communicated by Prof. Curtis as another C. Sauveni is~~ ~~known from~~ by the very large pellucid dots, ~~and the more shallow tube, still the want of~~ ~~Calyx lobes~~ to refer it to this species ~~the~~ The ♂ ~~another~~ Specimen from Georgia (for ♂ Boykin) has ~~the~~ very small scales, smaller than I have seen them in any other specimen of this species

♀ The carinae of the calyx are most prominent on the 3 outer lobes and sometimes hardly perceptible on the 2 inner ones — but even then the large irregular cells are easily distinguished.

P The styles are in some specimens a little longer than the ovary, which appears to be ~~covered~~ crowned by a stylopodium. this however is hardly possible to ascertain satisfactorily in the dried plant. —

Delphinium dictyocarpum Cand

Spr E, 619

laxiflorum Cand

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Sibir

H.B Fr 1824

5466

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describe a varietal plant. The name may
therefore properly be reserved for Sloane's plant
or may be discarded altogether. ~~at present~~
~~(strictly speaking)~~ The only reason
that I have for supposing that most north
american authors give it to C. canadensis is
that this is the most common & the
widest spread species in the U. States, and
has generally longer peduncles than any other.

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Delphinium intermedium Ait
alpinum Ait
revolutum Desf
elatum L

Fr II, 619
Ait, 384

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Cuscuta californica Choisy ?
C. acuminata Nutt mss !

Caule capillaceo
floribus pedicellatis 5-fidis
calycis lobis ovatis acutis
lacinias. corollae linearis lanceolatis
setaceo- acuminatis, apice reflexis
antheris oblongo- ovatis ?

Probably the same as ~~Nuttalli~~ Douglas' plant
I have only seen a few fragments of one
or two flowers. The texture of calyx and
corolla appears to be similar to C. americana
pentagyna etc, and we may conclude that
the ovary is also similar — The long porrect
setaceous acuminations of the corolla lobes
which are mostly hooked or curved backwards.
distinguish it well from any other
at the apex
species. —

vide Choisy N. 24 pag 183

Cuscuta californica Choisy
C. acuminata Nutt mss.

Caule capillaceo; fasciculis florum laxis
(2-3)
pauciflonis; floribus singulis pedicellatis
5-partitis; tubo corollae campanulato
brevissimo, calycis segmentis ovato-
lanceolatis, acuminatis apice
recurvis (v. circinnatis) multo
breviore; laciniis ~~patulis~~ limbi lanceo-
lanceolatis acuminatis, subexertis
tubum triplo quadruplove excedentibus;
staminibus limbo multo brevioribus;
(antheris oblongo- linearibus filamentis setaceis
~~filiformibus exertis~~ subaequantibus;
squamis ?
stylis ~~filiformibus~~ tenuissimis ovarium
globosum multoties superantibus,
antheras aequantibus; capsula ?

Sta Barbara, California, Nuttall
Very probably the same as Choisy's plant (Monogr p. 183)
coll by Douglas. My specimen, obtained

5468

~~Anchusa capensis Thunb.~~

Feb 1862

from the Herb. of the Academy of Philadelphia
grows on some Eriogonum; it is just
beginning to flower, & the description
& drawing is taken from the only open
flower it presented. In the flower
buds present already a very remarkable appearance
the ~~pointed~~ corolla, and ~~project the only lobes~~
the reversed calyx-lobes.

The capitularies stems & branches, is valle as the pedicels
~~have many~~ The texture of calyx & corolla
is very thin, & at least in the
dry state semi-transparent.
Scales I could not distinguish in the
single flower I examined
but I hardly doubt of their presence.
The anthers are sessile obl
& rather longer than their filaments, and the
small globular stigmas reach
to the same elevation - the flower
styles capillary many times
longer than the ~~it~~ globose ovary
& capsule I have not seen.
~~but doubt any title of its~~
~~bony globose~~. The whole plant
resembles ~~it~~ many respects the
texican C. cuspidata and
belongs without doubt to the
same section. The very
significant name of Nuttall
C. arenaria ~~explodes~~ should be
retained, if priority was not
in favor of the other.

~~Cap d'Nigar~~

and have entirely the appearance
of the same organs in
C. americana

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C. ~~canicata~~ [illegible]

The Cusconta canicata is perhaps the Cuscuta americana of Linnaeus (in part) and of many later but authors & but their diagnoses are too incomplete to decide this point, and undoubtedly different species have been confused under this name. Even Linnaeus himself (Syst plant ed. 5. p. 124) referring to Gronov. virg. 18 and to Sloane hist. I p. 201. t. 128. f. 4.) ~~such [illegible] are undoubtedly different plants.~~ Later authors ~~in~~ like ~~to the~~ wrote ~~Plant~~ confuse ~~two different species and this name~~ two distinct species

Which of them is the true Cuscuta americana?

~~While~~ If some authors ~~apply~~ the name to one or the other ~~both species, the reference is to~~ a ~~distinct~~ plant. But it is also impossible to ascertain ~~what species Linnaeus had~~ the following words only:

"Cuscuta floribus pedunculatis."

Michaux I, 175 C. floribus pedicellatis, pentandris

Pursh I, 116, says C. fl. pedunculatis umbellatis

3-fidis. Other botanists adopt this specific name,

Nuttall gen. II adds on the other hand has it flowers mostly pentandrous and sessile, and Sprengel (syst veg I, 864) brings his C. americana under the section with glomerate subsessile flowers.

While those authors refer to one or more North American species, others, Linné [illegible] apply the name to the western plant ~~figure~~ ~~refers to~~ ~~Sloane~~ also ~~represents~~. (Hist I. t. 128 f. 4.) Jacquin Stirp am p. 24 and Swartz obs p. 54 &c.

5469

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